Atty. Dkt. PD020074

Application Serial No.: 10/625,328

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE Before the Board of Patent Appeals and Interferences

Applicant:

Weitbruch

Serial No.

10/625,328

Filed:

07/23/2003

For:

METHOD AND DEVICE FOR PROCESSING VIDEO DATA FOR

**DISPLAY ON A DISPLAY DEVICE** 

Examiner:

Brautigam, Alysa N.

Atty. Dkt:

PD020074

Art Unit:

2676

#### **Mail Stop Appeal Brief-Patents**

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

#### APPEAL BRIEF

May It Please The Honorable Board:

This is Appellants' Brief on Appeal from the final rejection of Claims 1 - 16. Appellants filed a Notice of Appeal on March 10, 2006. A petition pursuant to 37 CFR 1.136 extending the time to respond to August 10, 2006 is filed herewith. Accordingly, this Appeal Brief is considered timely filed. Appellants waive an Oral Hearing for this appeal.

The Office is authorized to charge any fees due and owing, or credit any overpayment, to Deposit Account No. 50-3208. Enclosed is a single copy of this Brief.

REAL PARTY IN INTEREST 2006 TBESHAHI 00000021 1062532A

The real party in interest of Application Serial No. 69/763,773 is:

500.00 OP

Thomson Licensing Inc. Two Independence Way P.O. Box 5312 Princeton, New Jersey 08543

#### II. RELATED APPEALS AND INTERFERENCES

There are currently, and have been, no Appeals or Interferences regarding Application Serial No. 10/625,328 known to the undersigned attorney.

#### III. STATUS OF THE CLAIMS

Claims 1 – 16 stand rejected. Claims 8 – 16 have been cancelled, without prejudice, in an amendment filed contemporaneously herewith. A copy of this Amendment has been attached hereto as Appendix VI. Accordingly, the rejection of Claims 1-7 is appealed.

#### IV. STATUS OF AMENDMENTS

All prior amendments have been entered. The contemporaneously filed (attached) amendment is reflected in the claims included in Appendix I.

#### V. SUMMARY OF CLAIMED SUBJECT MATTER

This summary sets forth exemplary reference characters, pages and line numbers in the specification. The identification of reference characters, pages and line numbers does not constitute a representation that any claim element is limited to the embodiment illustrated at the reference character or described in the referenced portion of the specification.

#### Claim 1

Independent claim 1 recites a method for processing video data for display on a display device having a plurality of luminous elements. (See, e,g., specification, page 6, lines 22-31 ("The present invention proposes a method for processing video data for display on a display device having a plurality of luminous elements by applying a dithering function to at least part of said video data to refine the grey scale portrayal of video pictures of said video data, computing at least one motion vector from said video data and changing the phase, amplitude, spatial resolution and/or temporal resolution of said dithering function in

accordance with said at least one motion vector when applying the dithering function to said video data").

The first recited step of claim 1 is applying a dithering function to at least part of the video data to refine the grey scale portrayal of video pictures of the video data. (See, e.g., specification: page 7, lines 24-27 ("the application of the dithering function or pattern may be based on single luminous elements called cells of the display device. i.e. to each colour component R, G, B, of a pixel separate dithering numbers may be added."); page 8, lines 23-26 ("The dithering according to the present invention may be based on a Cell-based or multimask dithering, which consists in adding a dithering signal that is defined for every plasma cell and not for every pixel."); page 9, lines 29-31 ("the new dithering pattern will depend on five parameters and can be defined as following:  $\zeta(x_o, y_o, V_x(x_o, y_o, t), V_y(x_o, y_o, t), t)$ ."); page 11, lines 5-12 (referring to dithering block 12 of Fig. 3); Fig. 3, dithering block 12).

The second recited step of claim 1 is computing at least one motion vector from the video data. (See, e,g., specification, page 8, lines 1-2 ("the motion vector is computed for each pixel individually"), page 8, lines 6-7 ("the motion vector should be computed for both spatial dimensions x and y"), page 10, lines 7-12 ("for each pixel  $M(x_0, y_0)$  of the screen, a vector  $\vec{V}(x_0, y_0, t_0) = (V_x(x_0, y_0, t_0), V_y(x_0, y_0, t_0))$  representing its movement at time  $t_0$  is provided."), page 11, lines 14-18 (referring to motion estimator 14 of Fig. 3); Fig. 3, motion estimator block 14).

The third recited step of claim 1 is changing at least one of the phase, amplitude, spatial resolution and temporal resolution of the dithering function in accordance with the at least one motion vector when applying the dithering function to the video data. (See, e,g., specification, page 8, lines 31-35 ("The adaptation of the dithering pattern to the movement of the picture to suppress the dithering structure appearing for specific movement may be obtained by using a motion estimator to change the

phase or other parameters of the dithering function for each cell."), page 9, lines 23-34 ("In order to suppress the visible pattern of a classical matrix dithering in case of moving pictures the motion of the picture is taken into account by using a motion estimator. This will pixel  $M(x_0,y_0)$ the vector provide, for each screen,  $\vec{V}(x_0, y_0, t_0) = (V_x(x_0, y_0, t_0), V_y(x_0, y_0, t_0))$  representing its movement. In that case, this vector can be used to change the phase of the dithering according to the formula:  $\phi = (x_0 - V_x(x_0, y_0), y_0 - V_y(x_0, y_0), t_0)$ . More generally the new dithering pattern will defined depend five parameters and can following:  $\zeta(x_o, y_o, V_x(x_o, y_o, t), V_y(x_o, y_o, t), t)$ ."; Figs. 3 and 4, dithering unit 12 and motion estimator 14).

#### VI. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

Claims 1-2, 6 and 7 stand finally rejected as being unpatentable under 35 USC 103(a) over United States Patent 6,421,466 (Lin) in view of United States Patent No. 5,907,316 (Mikoshiba). Claims 3-5 stand finally rejected as being unpatentable under 35 U.S.C. 103(a) over Lin in view of Mikoshiba and further in view of European Patent Application EP1136974A1 (Correa).

#### VII. ARGUMENT

#### **CLAIMS 1-7**

The cited prior art fails, in any combination, to render any of Claims 1-7 unpatentably obvious under 35 U.S.C. 103(a).

#### I. Standard for Unpatentability Under 35 U.S.C. 103(a)

To establish a prima facie case of obviousness, all of the recited claim limitations must be taught or suggested in the prior art. See, M.P.E.P. 706.02(j); see also, M.P.E.P. 2143.03

citing In re Royka, 490 F.2d 981, 180 USPQ 580 (CCPA 1974) ("All words in a claim must be considered in judging the patentability of that claim against the prior art.") and In re Wilson, 424 F.2d 1382, 1385, 165 USPQ 494, 496 (CCPA 1970).

As discussed below, the cited prior art references, both singly and in combination, fail to teach or suggest all of the limitations of Claims 1-7; and hence fail to render the pending claims unpatentable as a matter of law.

#### II. 35 U.S.C. 103(a) Rejection of Claim 1

#### A. Motion Compensated Dithering

Independent Claim 1 recites:

A method for processing video data for display on a display device having a plurality of luminous elements comprising:

applying a dithering function to at least part of said video data to refine the grey scale portrayal of video pictures of said video data,

computing at least one motion vector from said video data, and

changing at least one of the phase, amplitude, spatial resolution and temporal resolution of said dithering function in accordance with said at least one motion vector when applying the dithering function to said video data.

Accordingly, Claim 1 broadly encompasses motion compensated dithering by: (1) applying a dithering function to video data; (2) computing at least one motion vector; and (3) changing the dithering function itself, in accordance with the computed motion vector(s).

Dithering artificially increases the number of displayed video levels, and enables one to refine the grey scale portrayal of video pictures. *See, specification, page 2, lines 17-19*. In other words, dithering simulates more colors and shades in a palette. In a monochrome system that supports only black and white, shades of grays can be simulated by creating varying patterns of black dots. This is how halftones are created in a monochrome printer. In

color systems, additional colors can be simulated by varying patterns of dots of existing colors.

The problems addressed by the present invention relate to motion rendition. While static, three-dimensional matrix dithering may yield good results for rendering static images on displays, problems arise as soon as the image moves. To address these problems, according to the method of Claim 1, the dithering function is modified according to the determined motion, e.g., computed motion vectors.

The following example is provided for non-limiting purposes of further explanation. Static 3-dimentional dithering is based on a spatial (2 dimensions x and y) and temporal (third dimension t) integration of the eye. See, e.g., specification, page 4, lines 13-20. Static-three dimensional matrix dithering may be represented as a function of three variables:  $\varphi(x,y,t)$ . The three parameters x, y and t represent a kind of phase for the dithering. See, Id. This is shown in and discussed with regard to Fig. 2 of the subject application.

In the illustrated example, and as described on pages 4 and 5 of the specification, the values displayed in the picture change slightly for each plasma cell in the vertical and horizontal directions. See, e.g., page 4, lines 21-25. In addition, the values also change for each frame. See, Id. In the example provided, cell values for the frame displayed at time  $t_0$  is: value A  $(\phi(x_0,y_0,t_0))$ , value B  $(\phi(x_0,y_0,t_0))$ , value B  $(\phi(x_0,y_0,t_0))$ . This appears as:

Ā	B,		
$(\mathbf{x}_0,\mathbf{y}_0,\mathbf{t}_0)$	$(x_{0+1},y_0,t_0)$		
В	A		
$(x_0,y_{0+1},t_0)$	$(x_{0+1},y_{0+1},t_0)$		

One frame later, at time  $t_0+1$ , the values appear as value B  $(\phi(x_0,y_0,t_0+1))$ , value A  $(\phi(x_0+1,y_0,t_0+1))$ , value B  $(\phi(x_0+1,y_0+1,t_0+1))$ , value A  $(\phi(x_0,y_0+1,t_0+1))$ , or:

В	A,		
$(x_0,y_0,t_{0+1})$	$(x_{0+1},y_0,t_{0+1})$		
A	В		
$(x_0,y_{0+1},t_{0+1})$	$(x_{0+1},y_{0+1},t_{0+1})$		

The spatial resolution of a typical human eye is sufficiently good to be able to see a fixed static pattern A, B, A, B at time  $t_0$  and B, A, B, A at time  $t_{0+1}$ , but when the third dimension (time) is added (e.g., the frames at times  $t_0$  and  $t_{0+1}$  switch back and forth), then the human eye sees the average value of each cell (A+B/2) in each cell. That is, as each cell changes from frame-to-frame, the eye time response of several milliseconds (temporal integration) can be represented by:  $Eye(x_o, y_o) = \frac{1}{T} \sum_{t=t_o}^{t=t_o+T} \varphi(x_o, y_o, t)$ , which, in the example, leads to  $Eye(x_o, y_o) = \frac{A+B}{2}$ . See, specification, page 4, line 21 – page 5, line 30. Thus, a static three-dimensional dithering pattern can be used to artificially increase the number of displayed video levels to include the average between values A and B.

However, when displaying moving objects, the human eye follows the objects and no longer integrates the same cell over time (e.g., cell  $(x_0, y_0, t_0)$  and cell  $(x_0, y_0, t_{0+1})$ ). The visibility of the static three-dimensional dithering pattern is thus affected.

In order to better understand this problem, consider the movement  $\vec{V} = (1;0)$ , which represents a horizontal motion of one pixel per frame. In that case, the eye will look at cell  $(x_0,y_0)$  at time  $t_0$  and then it will follow the movement to pixel  $(x_0+1,y_0)$  at time  $t_0+1$  and so on. In that case, the cell seen follows:

$$Eye = \frac{1}{T} (\varphi(x_o, y_o, t_o) + \varphi(x_o + 1, y_o, t_o + 1) + ... + \varphi(x_o + T, y_o, t_o + T)), \quad \text{which} \quad \text{leads} \quad \text{to}$$

$$Eye = \frac{1}{T} (A + A + ... + A) = A \quad \text{(as opposed to A+B/2)}. \quad \text{This results in the dithering being}$$

either more or less visible depending on the movement. See, page 5, line 29 – page 6, line 16. The claimed invention seeks to address this shortcoming. See, page 6, lines 17-20.

In order to avoid such a problem, the motion of the picture is accounted for using a motion estimation. This provides, for each pixel  $M(x_o, y_o)$  of the screen, a vector  $\bar{V}(x_o, y_o, t_o) = (V_x(x_o, y_o, t_o), V_y(x_o, y_o, t_o))$  representing its movement at time  $t_o$ . The new dithering pattern depends on five parameters and can be defined as following:  $\zeta(x_o, y_o, V_x(x_o, y_o, t), V_y(x_o, y_o, t), t)$  (as opposed to the three parameter static three-dimensional dithering function  $\varphi(x,y,t)$ ). See, specification, page 9, lines 23-34.

Lin and Mikoshiba, both singularly, and in combination, fail to teach or suggest such a motion compensated dithering, and thus fail to render Claim 1 unpatentable.

# B. Lin and Mikoshiba Fail, In Any Combination, To Teach Or Suggest Motion Compensated Dithering

The Final Office action acknowledges that Lin fails to teach motion compensated dithering. See, e.g., 10/25/2005 Office action, page 5, lines 4-6 (Lin does not explicitly disclose wherein the phase, amplitude, spatial and/or temporal resolution of the dithering function chang[es] in accordance with the motion vector."). Although Lin may disclose computing motion vectors for video data, and may further disclose that dithering methods can be used to reduce the width or number of bits for each pixel, the computing of motion vectors and the dithering methods of Lin are wholly independent of one another. In an effort to remedy the admitted shortcoming of Lin, the Examiner imports select portions of the Mikoshiba reference. See, e.g., 10/25/2005 Office action, page 5, lines 6-16. However, a detailed reading of Mikoshiba reveals that it fails to remedy the deficiency of Lin with regard to motion compensated dithering.

Mikoshiba does not teach or suggest motion compensated dithering, but instead addresses the "dynamic false contour effect". By way of example, where a display utilizes a

matrix array of discharge cells that can only be "ON" or "OFF", a simple 8-bit rendition method is based on dividing each frame into 8 lighting periods (sub-fields), each corresponding to a bit weight as is shown in Figure 1 of Mikoshiba. By combining the 8 sub-fields, it is possible to display 256 gray levels.

The dynamic false contour effect leads to the appearance of colored edges in the picture when an observation point on the screen moves, and to a visible degradation of picture sharpness. When the eye follows on-screen movement, it integrates information coming from different cells located on the movement trajectory and mixes the gathered light pulses together – leading to a false contour, as is shown in Figs. 36-38 of Mikoshiba. Mikoshiba presents a specific motion estimator to provide a false-contour-free display and thus sharp moving pictures.

The motion vectors provided by the Mikoshiba motion estimator are used to modify the sub-field position along the optic flow axis prior to temporal interpolation. Mikoshiba interpolates the positions of sub-fields between the location of the current pixel in a frame N and the future position of the same pixel in consecutive frame N+1. Based on this interpolation, a new pixel position for each sub-field is precisely chosen. Thus, Mikoshiba merely uses motion vectors to re-position each moving pixel in each sub-field to reflect the position of the human eye integration trajectory. Mikoshiba, however, does not teach or suggest changing a dithering function in accordance with a motion vector, e.g., a motion compensated dithering function. In other words, while Mikoshiba may teach motion compensated pixel re-location in subfields, it does not teach or suggest motion compensated dithering, i.e., artificially increasing the number of displayed video levels responsively to at least one computed motion vector. The portions of Mikoshiba the Examiner relies upon confirm this distinction.

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For example, the Examiner relies upon col. 2, line 60 – col. 3, line 5 of Mikoshiba for the proposition that "Mikoshiba teaches displaying half-tone [dithered] images wherein the spatial resolution of said dithering function is changed in accordance with said at least one motion vector when applying the dithering function to said video data." However, a reading of Mikoshiba reveals the above conclusion is erroneous. Instead, the relied upon passage (col. 2, line 60 – col. 8, line 5) reads, in its entirety:

In addition, according to the present invention, there is also provided an apparatus for displaying a halftone image on a display unit by using a frame division technique that divides each frame of the halftone image into subframes each having a specific sustain discharge period to provide a specific intensity level, comprising a motion vector detection unit for detecting a motion vector that indicates a moving direction of the halftone image, by comparing display data for a first frame of the halftone image with display data for a second frame next to the first frame; and a differing unit for differing the display position of the halftone image from subframe to subframe in the first frame according to the motion vector. (emphasis added)

Thus, the motion vectors of Mikoshiba discussed in this passage are merely used by a differing unit to alter the display position of a halftone image from subframe to subframe – and not to change the dithering function that creates the halftone image – as is recited by Claim 1. In other words, the passage of Mikoshiba referenced in the Final Office action confirms Mikoshiba merely changes the display position of a dithered image, rather than changing the dithering function that increases the number of displayed video levels of the image itself (e.g., actually halftones the image) – as is recited by Claim 1.

Similarly, the Office action incorrectly relies upon col. 3, lines 26-38 of Mikoshiba for the proposition that Mikoshiba teaches changing the temporal resolution of the dithering function in accordance with the computed at least one motion vector when applying the dithering function to said video data. Instead, a detailed reading of this passage reveals that it merely relates to overall frame intensity levels. The paragraph immediately preceding this

passage in Mikoshiba explains that each frame of a halftone image is divided into subframes having specific discharge periods and hence specific intensities. See, col. 3, lines 15-19. The intensity level of a given pixel is compared in two consecutive frames. See, col. 3, lines 20-22. Further, an intensity level adjusting subframe can be enabled or disabled, based upon the comparison. See, e.g., col. 3, lines 23-25. Finally, the relied upon passage teaches the intensity level adjusting subframe has an intensity between those of the two compared frames. See, e.g., col. 3, lines 26-37.

Accordingly, the relied upon passage of Mikoshiba merely teaches that when an intensity of a pixel changes in consecutive frames, an intermediate frame of intermediate intensity may be provided; this is regardless of, and independent of any motion vectors. In other words, this aspect of Mikoshiba merely lightens or darkens intermediate subframes of consecutive frames dependently upon intensity differences between the consecutive frames, and hence, also does not present motion compensated dithering – no less changing the temporal resolution of the dithering function in accordance with the computed at least one motion vector when applying the dithering function to said video data, as is recited in Claim 1.

In view of the foregoing, the Lin and Mikoshiba references, both singularly, and in combination, fail to teach or suggest each of the features and limitations recited in present Claim 1. Reconsideration and removal of the 35 U.S.C. 103 rejection is requested.

#### III. Claims 2-7

Applicant also requests reversal of the rejections of Claims 2-7 as well, at least by virtue of their ultimate dependency upon a patentably distinct base Claim 1.

#### VIII CONCLUSION

Claims 1-7 broadly encompass motion compensated dithering by: (1) applying a dithering function to video data; (2) computing at least one motion vector; and (3) changing the dithering function itself, in accordance with the computed motion vector(s). In contradistinction, Lin and Mikoshiba, both singularly, and in combination, fail to teach or suggest motion compensated dithering, no less changing the dithering function itself, in accordance with the computed motion vector(s).

Accordingly, the cited art of record clearly fails to teach the claimed method and thus fails to render Claim 1 unpatentable. All of Claims 2 - 7 ultimately depend from Claim 1. In view of the foregoing, it is respectfully submitted that the rejection of Claims 1 - 7 should be reversed.

Respectfully submitted,

By:

c/o THOMSON LICENSING INC. Patent Operations CN 5312 Princeton, NJ 08543-0028 Edward J. Howard

Attorney for Applicant
Registration No. 42,670

#### Certificate of Mailing under 37 CFR 1.8

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Signature

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#### APPENDIX I - APPEALED CLAIMS

1. (Previously Presented) A method for processing video data for display on a display device having a plurality of luminous elements comprising:

applying a dithering function to at least part of said video data to refine the grey scale portrayal of video pictures of said video data,

computing at least one motion vector from said video data, and

changing at least one of the phase, amplitude, spatial resolution and temporal resolution of said dithering function in accordance with said at least one motion vector when applying the dithering function to said video data.

- 2. (Previously Presented) The method according to claim 1, wherein said dithering function includes two spatial dimensions and one temporal dimension.
- 3. (Previously Presented) The method according to claim 1, wherein said dithering function includes the application of a plurality of masks.
- 4. (Previously Presented) The method according to claim 1, wherein said applying of said dithering function is based on single luminous elements of said display device.
- 5. (Previously Presented) The method according to claim 1, wherein said dithering function is a 1-, 2-, 3- or 4- bit dithering function.
- 6. (Previously Presented) The method according to claim 1, wherein said at least one motion vector is defined for each pixel or cell individually.
- 7. (Previously Presented) The method according to claim 1, wherein said at least one motion vector has two spatial dimensions.
- 8. (Cancelled)
- 9. (Cancelled)
- 10. (Cancelled)

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- 11. (Cancelled)
- 12. (Cancelled)
- 13. (Cancelled)
- 14. (Cancelled)
- 15. (Cancelled)
- 16. (Cancelled)

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## APPENDIX II - EVIDENCE

None

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## APPENDIX III - RELATED PROCEEDINGS

**None** 

## APPENDIX IV - TABLE OF CASES

In re Royka, 490 F.2d 981, 180 USPQ 580 (CCPA 1974)

In re Wilson, 424 F.2d 1382, 1385, 165 USPQ 494, 496 (CCPA 1970)

## APPENDIX V - LIST OF REFERENCES

Reference No.	<u>Issued Date</u>	<u>Inventor</u>
6,421,466	July 16, 2002	Lin
5,907,316	May 25, 1999	Mikoshiba
EP1136974A1	September 26, 2001	Correa

## APPENDIX VI - CONTEMPORANEOUSLY FILED AMENDMENT

Atty. Dkt. PD020074

OIPE Application Serial No.: 10/625,328

### IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

oplicant:

Weitbruch

Serial No.

10/625,328

Filed:

07/23/2003

For:

METHOD AND DEVICE FOR PROCESSING VIDEO DATA FOR

**DISPLAY ON A DISPLAY DEVICE** 

Examiner:

Brautigam, Alysa N.

Atty. Dkt:

PD020074

Art Unit:

2676

Commissioner for Patents

P.O. Box 1450

Alexandria, VA 22313-1450

#### **AMENDMENT AFTER NOTICE OF APPEAL**

Dear Sir:

A Notice of Appeal for the subject application was filed on March 10, 2006. An Appeal Brief is being filed contemporaneously herewith along with a petition under 37 CFR 1.136(a). Accordingly, the present Amendment is deemed to be timely filed. Should there be any fees due and owing with respect to this amendment, the Office is authorized to charge such fees to Deposit Account No. 50-3208.

Amendments to the Claims are reflected in the listing of Claims that begins on page 2 of this paper.

Remarks/Arguments begin on page 4 of this paper.

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Signature	Name

#### In the Claims:

Please amend the Claims as follows and without prejudice. This listing of Claims will replace all prior versions, and listings, of claims in the application.

#### **Listing of Claims**

1. (Previously Presented) A method for processing video data for display on a display device having a plurality of luminous elements comprising:

applying a dithering function to at least part of said video data to refine the grey scale portrayal of video pictures of said video data,

computing at least one motion vector from said video data, and

changing at least one of the phase, amplitude, spatial resolution and temporal resolution of said dithering function in accordance with said at least one motion vector when applying the dithering function to said video data.

- 2. (Previously Presented) The method according to claim 1, wherein said dithering function includes two spatial dimensions and one temporal dimension.
- 3. (Previously Presented) The method according to claim 1, wherein said dithering function includes the application of a plurality of masks.
- 4. (Previously Presented) The method according to claim 1, wherein said applying of said dithering function is based on single luminous elements of said display device.
- 5. (Previously Presented) The method according to claim 1, wherein said dithering function is a 1-, 2-, 3- or 4- bit dithering function.
- 6. (Previously Presented) The method according to claim 1, wherein said at least one motion vector is defined for each pixel or cell individually.
- 7. (Previously Presented) The method according to claim 1, wherein said at least one motion vector has two spatial dimensions.

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8 - 16 (CANCELLED)

STATUS OF CLAIMS

Claims 1 - 16 are pending.

Claims 1 – 16 stand rejected.

Claims 8 - 16 have been cancelled without prejudice.

**REMARKS** 

By this amendment, Applicant cancels Claims 8 – 16 without prejudice and for purposes of simplifying the issues for appeal, and subject to Applicant's right to reintroduce and seek further prosecution of these now cancelled claims in this or a

related application. Entry of this amendment is respectfully requested.

Should there be any questions or outstanding matters, the Examiner is cordially invited and requested to contact Applicant's undersigned attorney at his

number listed below.

Dated: July 20, 2006

c/o THOMSON LICENSING INC. Patent Operations CN 5312 Princeton, NJ 08543-0028 Respectfully submitted,

Edward J. Howard

Attorney for Applicant

Registration No. 42,670

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TRANSMITTAL OF APPEAL BRIEF (Large Entity)					Docket No. PD020074	
In Re Application Of: Weitbruch						
			Group Art Unit	Confirmation No.		
Invention:  METHOD AND DEVICE FOR PROCESSING VIDEO DATA FOR DISPLAY ON A DISPLAY  DEVICE						
			COMMISSIONER FOR PAT	ENTS:		
Trans	smitted herew	rith is the Appeal Brie	of in this application, with respec	ct to the Notice	of Appeal filed	on:
The f	ee for filing th	is Appeal Brief is:	\$500.00			
X	A check in the	he amount of the fee	is enclosed.			
	The Director	r has already been a	uthorized to charge fees in this	application to a	Deposit Accou	nt.
X	The Director is hereby authorized to charge any fees which may be required, or credit any overpayment to Deposit Account No. 50-3208 I have enclosed a duplicate copy of this sheet.					
	Payment by	credit card. Form PT	O-2038 is attached.			
WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.						
	Eh	Signature		Dated: July	20, 2006	
cc:				deposited with sufficient postage addressed to "C Alexandria, VA 2 Ju.ly 20, 2 (Date)	the United State ge as first class ommissioner for P 22313-1450" [37 CF	mittent> Correspondence

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